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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,253	09/09/2003	Akihisa Nakajima	KON-1822	4123

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EXAMINER

CHEA, THORL

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,253

Applicant(s)

NAKAJIMA ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 26, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-4, 6-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 1, 2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4, 6-8, 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fails to provide support for the language "wherein the copolymer is produced by a pearl polymerization method so as to form beads of said copolymer". The specification on pages 52-53, discloses the "polymer beads", rather than copolymer "copolymer" presented in the claimed invention.

4. Claims 1-4, 6-8, 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "beads" presented in the claimed invention is unclear since the specification fails to clearly define such term. Moreover, the language in (i) a

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fluorine containing acrylate or a fluorine containing methacrylate represented by formula (1) is unclear as to whether the formula (1) represents both a fluorine containing acrylate or a fluorine containing methacrylate or either one of them.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sampei (US Patent No. 6,190,854).

Sampei discloses a material having a thermally developable material having having fluorine surfactant which is a (meth)acrylate polymer which has fluorinate alkyl group on its side chains, and which has a number a layer average molecule weight of not more than 30,000 in terms of standard polystyrene conversion and more preferably from 2,000 to 10,000; the fluorine containing surfactant is incorporate in any of image forming layer, component layer, or the secondary component layer, but preferably a layer provide on the image forming layer side, or in an outermost layer provided opposite of said image forming layer, for example protective layer.

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See column 5, lines 47-67, column 6, formula (A-a), (A-b), A-1 to A-7; columns 7-13, formulae A-8 to A-65; (meth) acrylate structural unit of the (meth)acrylate polymer having the alkyl group of formulae in columns 15-16, C-1 to C-19; columns 17-18, C-20 to D1-17; Table 1 in column 19, and Example in columns 39-40, Table 2. such as sample 106. The (meth)acrylate structural unit of the (meth)acrylate polymer is considered as hydrophobic group within the meaning of monomer claimed in the present claimed invention. The copolymer of Sampei et al of formula A-1 to A-10 overlaps that of the claimed invention. Therefore, the claimed invention lacks novelty; alternatively, it would have been obvious to the worker of ordinary skill in the art to use the fluorinated copolymer taught therein with an expectation of achieving a material with excellent stability over passage of time as well as stable developability.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sampei (US Patent No. 6,190,854) as applied to claims 1-4, 6-8 above, and further in view of Artimoto et al (US Patent No. 6,475,697). The tin oxide has been known to be used in the electrically conductive layer for photothermographic material and taught in Arimoto et al in column 18, lines 9-22. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the tin oxide taught in Arimoto et al to improve the antistatic property of the material taught in Yonkoshi et al, and thereby provide a material as claimed.

Response to Arguments

9. Applicant's arguments filed August 26, 2005 have been fully considered but they are not persuasive for the reason set forth the rejection above. It is still the Examiner's position that the invention as claimed is either anticipated by or found obvious over Sampei (US Patent No. 6,190,854). Sampei et al may not disclose whether the polymer taught therein is in the form of

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“beads”, but it would have understood in the art that the polymer taught in Sampei et al would be in particle form. See column 5, lines 53-65 wherein the number average molecular weight of not more than 30,000 in terms of standard polystyrene conversion, and more preferably from 2,000 to 10,000. Moreover, the structure of the copolymer claimed in the claimed invention encompasses the scope of the copolymer of Sampei. The worker of ordinary skill in the art would have expected the polymer behave similarly in either beads form or any other forms when incorporate in the photothermographic material. The Declaration filed on August 26, 2005 states that the monomer mixtures FS-1 through FS-10 in Table 1 at column 19 of Sampei et al was not in form of beads and the copolymer is sticky. The applicants appears to conclude therefore the polymer of the claimed invention is not the polymer taught in Sampei et al. since it cannot not be used in the process of forming beads. It is the Examiner’s position that the Declaration fails to overcome the rejection. Whether or not the polymer can be used in the formation of bead, the polymer contains similar functional group, and it would have behave similarly when used in the photothermographic material. The polymer taught in Sampei et al would be particle form after polymerization which is within the scope of beads claimed in the present claimed invention. Moreover, the polymer that forming beads claimed in the present claimed invention contains a copolymer taught in Sampei et al. There is no different in composition thereof. It is unclear from the Declaration as to why the copolymer taught in Sampei et al cannot be used in the formation of beads, while the copolymer claimed in the present claimed invention wholly encompasses the scope of Sampei et al can be used in the formation of beads. There is no different in scope between the copolymer of the claimed invention and that of the prior art of record. Supposedly, the polymer taught in Sampei et al is not in the form of beads, the invention

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as claimed would still have been found *prima facie* obvious to the worker of ordinary skill in the art for the same reason set forth in the final office action which shown below.

The applicants' argument on March 22, 2005 is based on the unexpected results Sampei (US Patent No. 6,190,854) presented in the Declaration on March 22, 2005.

It is the Examiner's position that the invention as claimed is still anticipated by Sampei et al since the compound of the formula A-1 to A-7 and the monomer having hydrophobic group of formula in columns 15-18 are the compound of the Sampei et al preferred embodiment. Therefore, the invention as claimed have been known and preferred in Sampei et al and the invention lacks novelty. The worker of ordinary skill in the art would have also selected the compound of formula within the scope of formula in column 6, formula (A-b) with an expectation of achieving a material having smoother value of the surface of the image layer of not more than 100 mm Hg taught therein. The argument with respect to the unexpected results is not persuasive. First, "(E)vidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). Second, the Declaration is not commensurate with the scope of the claimed invention; the scope of the claimed invention encompasses the scope of the use the surfactant in any layer of the photothermographic material such as in the image forming layer, the layer provide an the image image layer side of the outermost layer provided opposite to the image forming layer such as disclosed in Sampei et al in column 5, lines 47-53, while the Declaration shows only the use of the surfactant on the back side of the support. Only one compound of formula M-5210 wherein n is 3 has been tested whereas the compound of formula 1 encompasses n form 1-4. The samples

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shown in the Declaration were also not accordingly to the material exemplified in Sampei et al while the composition of the claimed material wholly encompasses the material exemplified in Sampei et al. Moreover, the results shown in the Declaration is not related to the results shown in Sampei et al, for instance the results shown in column 30-40 Table 2 such as smoother surface value, density variation, and characteristic variation when thermally developed. The Declaration fails to show such unexpected improvement of those results. The Declaration therefore has a probative value in overcoming the prima facie case of obviousness rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *TC*
September 18, 2005

Thorl Chea
Thorl Chea
Primary Examiner
Art Unit 1752